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(54) **METHOD AND APPARATUS FOR DETERMINING LINEAR AND ANGULAR VELOCITY OF A MOVING BODY**

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(58) **Field of Search** **324/160–179, 324/207.12, 225**

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(57) **ABSTRACT**

An apparatus and method for determining linear and angular velocity of a moving body. A magnet is attached or fixed to the body, the velocity of which is to be determined. The apparatus comprises a sensor comprising a core of magnetic material and a coil wound about the core. The movement of the body and magnet relative to the core effects a time-varying magnetic field between the magnet and the core thereby producing Barkhausen effect time-varying voltage signals in the coil. The apparatus further comprises a system for detecting and processing the time-varying voltage signals so as to effect a transformation of the signals into data defining the velocity of the moving body.

6 Claims, 1 Drawing Sheet